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A preliminary avifaunal survey along the Rio Yanayacu-Pucate, Pacaya Samiria National Reserve, Loreto, Peru (*****)

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Abstract

We present the results of a rapid avifaunal survey along the Rio Yanayacu-Pucate, an area hitherto unvisited by ornithologists, within the Pacaya-Samiria National Reserve (PSNR), Loreto, Peru. We recorded 246 species in eleven days of field work, including five new records for PSNR (*Cathartes burrovianus*, *Picumnus castelnau*, *Catharus ustulatus*, *Sporophila bouvronides*, *Hemithraupis guira*). We also present noteworthy distributional and ecological data on an additional 13 species.

Key words: bird diversity, western Amazonia, varzea.

Resumen

Se presentan los resultados de un inventario ornitológico rápido a lo largo del Rio Yanayacu-Pucate, un sitio que no ha sido visitado antes por ornitólogos, en la Reserva Nacional Pacaya-Samiria (PSNR), Loreto, Perú. Se han registrado 246 especies en once días de trabajo de campo, con 5 nuevos registros para PSNR (*Cathartes burrovianus*, *Picumnus castelnau*, *Catharus ustulatus*, *Sporophila bouvronides*, *Hemithraupis guira*). También se presentan datos notables sobre la distribución y ecología de otras 13 especies.

Palabras clave: avifauna, diversidad, Amazonia occidental, varzea.

Introduction

This paper presents bird records based on sight records, tape recordings, mist net captures, and specimens collected during a preliminary multi-taxa survey (ECOMUSA Project) conducted by the Museo di Storia Naturale di Carmagnola (Torino, Italy) and the Universidad Nacional de la Amazonia Peruana, Iquitos (Loreto, Peru) at two sites in the Pacaya-Samiria National Reserve (PSNR), Loreto, northeastern Peru, from March 14 to March 24, 2002.

The PSNR is the largest protected area in the Peruvian Amazon, covering over 2 million hectares. It is located

south of the Amazon/Maranon river, and east of the Ucayali, two important biogeographical barriers (fig. 1), and its avifauna thus differs to some extent from that of other localities in Loreto located on the north bank of the Amazon/Maranon. Extensive ornithological field work was conducted in PSNR by Begazo & Valqui (1998a), resulting in a total of approximately 495 species recorded from the reserve (Begazo & Valqui, 1998b). Nevertheless, vast areas of the PSNR remain unexplored by ornithologists. Ours is the first ornithological survey along the Rio Yanayacu-Pucate, which is a different river from the Rio Yanayacu where Begazo & Valqui (1998a) conducted part of their field work.

Study Sites

XX de Enero (4° 39' S, 73° 49' W; 102 m a.s.l., March 14 and March 21-24). This is a small village on the right bank of the Rio Yanayacu-Pucate, about 1 km upstream from its confluence with the Marañon River. Habitats near the

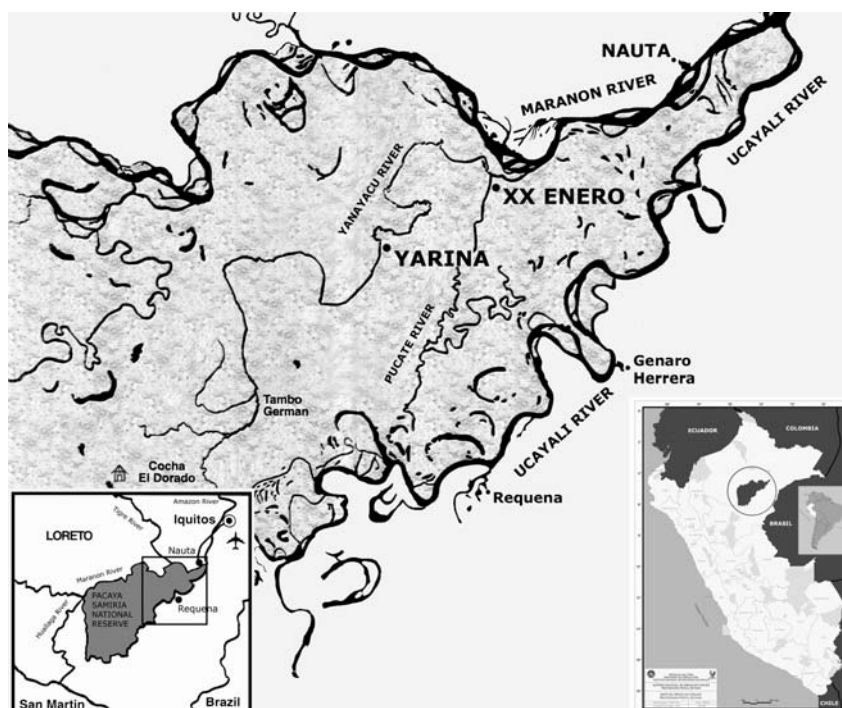


Fig. 1. Map of the Rio Yanayacu-Pucate with the localization of Yarina and XX de Enero.



Fig. 2. Views of the flooded varzea forest close to XX de Enero. (Photo S. Zucca).

village where field work was conducted include orchards, second growth, rather degraded varzea forest behind the village, flooded varzea forest (surveyed by canoe), and flooded, *Cecropia* dominated second growth.

Yarina (4° 45' S, 73° 59' W; m 110 a.s.l., March 15-21). This is another small village on the right bank of the Yanayacu-Pucate, about 20 km upstream from XX de Enero. Human impact is much more limited here, and there are no other settlements on the Yanayacu-Pucate upstream from Yarina. Most of the field work here was concentrated in varzea and transitional forest. Sporadic observations were also made during boat travel between the two sites.

Methods

Birds were recorded through visual observations using 8 x 42 and 10 x 40 binoculars and tape recorded with a Sony TCM 5000 tape recorder and Sennheiser ME 80 directional microphone. Surveys were conducted either on foot, or by canoe on the Rio Yanayacu-Pucate. In addition, mist-nets set from ground level to 2 meters high were used at both XX de Enero and Yarina in order to sample the understory avifauna. Mist-net lines of 10-20 nets (using 12-meter nets) were run for a total of 570 net-hours at Yarina and 300 net-hours at XX de Enero. A total of 196 individuals of 58 species were mist-netted in both sites among them 8 species were detected exclusively by mist-net capture. Field work



Fig. 3. View of the Rio Yanayacu-Pucate close to Yarina. (Photo M. Pavia).

was carried out under a specific permit from the “Instituto Nacional de Recursos Naturales, Ministerio de Agricultura, Republica del Perú” n° 01 C/C-2002-INRENA-DGANP of the 12/3/02. The collected specimens are held in the Museo Civico di Storia Naturale of Carmagnola, Italy (MCCI) and at the Universidad de la Amazonia Peruana, Peru (UNAP) (fig. 4).

All bird photographs are by G. B. (cfr. figs. 5-17); video recordings were made by Alberto Tamiotti. Taxonomy and nomenclature of birds follow Schulemberg *et al.* (2007).

Results

A total of 246 bird species were recorded at our two study sites, with 190 species recorded at Yarina, and 144 species recorded at XX de Enero (Appendix I). These include five new records for Pacaya-Samiria National Reserve according to Begazo and Valqui (1998b). More details on these and other noteworthy records are found below.

Lesser Yellow-headed Vulture *Cathartes burrovianus* - This species was found to be fairly common at XX de Enero, with approximately 10 individuals sighted on March 22 and 23. Surprisingly, this species was not listed by Begazo and Valqui (1998b) as occurring in PSNR. Nevertheless, the species is common at Iquitos and its presence in the XX de Enero area is not unexpected.

“Painted” Parakeet *Pyrrhura* cfr. *picta* - This species was recorded on three occasions: a flock of 4 individuals between XX de Enero and Yarina on March 14, a single individual at Yarina on March 15, and a flock of 10 birds there on March 16. The *P. picta* complex has recently been the focus of taxonomic studies arguing that it is best considered as comprising six species, including two previously undescribed ones (Joseph 2002). An undescribed form of *P. picta* (*sensu lato*) is found south of the Amazon and east of the Ucayali in Peru, and this could be the taxon occurring in Pacaya-Samiria (T. Schulenberg *in litt.*). The newly described (Joseph, 2002) Wavy-breasted Parakeet *P. peruviana* was collected in the 19th century at Chamicuros, which does not appear on modern maps, but was apparently on the upper Rio Samiria (T. Schulenberg *in litt.*). This taxon could also therefore occur in PSNR. Unfortunately, all sightings of this species were too distant to note exact plumage details, but establishing which taxon (or taxa) of the *P. picta* complex occur in PSNR should be a priority in any further surveys.

Rufous-necked Puffbird *Malacoptila rufa* - At Yarina, one individual of this species was observed as it perched silently on a horizontal branch about 2 meters above the ground on March 15. It was remarkably tame, and allowed itself to be approached as close as 1.5 meters before flushing. There are five previous sightings of this generally rare and inconspicuous species from PSNR (Begazo & Valqui, 1998a); our record



Fig. 4 - Most woodcreepers have very similar rust-brown, creamy-spotted plumages. Left to right specimens of: *Xiphorhynchus elegans* MCCI-2504, *X. obsoletus* MCCI-2522, *X. picus* MCCI-2523 and *Deconychura stictolaema* MCCI-2525.

from a new location suggests that it is rather widely distributed throughout PSNR. Furthermore, at another site in Loreto south of the Amazon (but east of the Ucayali), this species “was encountered with surprising frequency” (Robbins *et al.*, 1991), suggesting that this species may in fact be more common than previously thought, at least in this part of the Peruvian Amazon.

Plain-breasted Piculet *Picumnus castelnaui* - At least three individuals of this species were observed (and one video-taped) in flooded forest and *Cecropia*-dominated second growth at XX de Enero on March 23. This is the first record for PSNR of this generally uncommon and local species.

Spot-throated Woodcreeper *Deconychura stictolaema* (figs. 4, 9) - Until recently, most literature treated this



Fig. 5. *Bucco macrodactylus*.

species as uncommon to rare throughout its range, and restricted to *terra firme* forest (Ridgely & Tudor, 1994). In Peru, it is listed “rare and local in humid lowland *terra firme*” (Clements & Shany, 2001), and “rare to uncommon” (Schulenberg et al., 2007); a recent summary of the status and distribution of birds in Loreto (Wiley, 1999) lists its status and habitat preferences in the province as unknown, thus underlining how poorly known this species is in Peru. This taxon was actually rather common at Yarina, with four individuals captured in mist-nets during a relatively limited effort (in fact, this was the 8th commonest species mist-netted at Yarina), a single individual observed foraging about 1 meter above the ground with an understory mixed-species flock on March 18, and another individual observed on March 20. These findings are supported by the latest literature on this species (Marantz et al., 2003), which states that *D. stictolaema* is actually fairly common to common through most of its range, occurs in both *terra firme* and *varzea*, and is most easily detected through mist-netting. This species was not included in a checklist of PSNR by Begazo & Valqui (1998b), although there apparently are previous records from the Reserve (R. Ridgely *in litt.*).

SPECIMEN DATA – MCCI-2524 (skin and tissue), male, *wing*: 85.0; *tail*: 20.0; *tarsus*: 21.9. MCCI-2525 (skin and tissue), male, *wing*: 82.5; *tail*: 64.0; *tarsus*: 20.0; *bill*: 21.4; *iris*: dark-brown.

Buff-throated Woodcreeper *Xiphorhynchus guttatus* - An individual of this species collected at Yarina on March 15 showed well developed testes (10 x 1 mm), indicating ongoing breeding activity. We report this datum in order to improve knowledge on the reproductive biology of neotropical birds, as we have done for the recently investigated Parque Nacional de Yanachaga-Chemillen (Pasco, Peru) (Janni et al., *in press*).

SPECIMEN DATA – MCCI-2598 (alcohol and tissue), male, *wing*: 127.0; *flat wing*: 120.0; *tail*: 110.0; *tarsus*: 24.7; *bill*: 41.3; *iris*: grey-brown; *legs*: azure-grey; *testes*: 10.0 x 7.0.

Red-and-white Spinetail *Certhiaxis mustelina* - Very little is known about the nesting biology of this bird, with only a description of the nest being available (Remsen, 2003). On March 23 we located and video-taped an active nest of this species in flooded, *Cecropia*-dominated second growth at XX de Enero. The nest was a ball of small sticks, about 30 cm in diameter, placed on a horizontal branch about 2 meters above the water. The birds did not appear to be feeding young, and may have been incubating. The nest agrees well with the description provided by Remsen (2003), and the timing suggests that at least in Peru this species nests during high-water season.

Plain-winged Antshrike *Thamnophilus schistaceus* - Begazo & Valqui (1998b) list both this species and the closely related Mouse-coloured Antshrike *T. murinus* as uncommon in PSNR. At both Yarina and XX de

Enero, *T. schistaceus* was the only member of this species pair to be recorded, and was in fact common at Yarina, with up to 8 individuals seen or heard daily.

Silvered Antbird *Sclateria naevia* - This species was only recorded at Yarina, with 2 individuals heard singing and one individual seen, all in small swampy areas inside the forest. Surprisingly, this species was never seen nor heard in riverside vegetation, despite considerable time spent in canoes in apparently suitable habitat. The Silvered Antbird is said to be often found in the same places as *Hypocnemoides* antbirds (Zimmer & Isler, 2003), but at Yarina these species were found in different habitats: while the Band-tailed Antbird *Hypocnemoides maculicauda* was fairly common in riverside vegetation along the Rio Yanayacu-Pucate, with up to 5 birds heard daily in this habitat, *S. naevia* was not recorded along the river; conversely, *H. maculicauda* was not recorded in the swampy areas inside forest where *S. naevia* was found.

Spot-backed Antbird *Hylophylax naevius* (fig. 15) - This species was found to be fairly common at Yarina. Recent studies suggest that *H. naevius* may actually include more than one species, and vocal differences play an important role in establishing species limits within this complex (Zimmer & Isler, 2003). An individual tape-recorded on March 15 in *varzea* at Yarina matched example 3 on Isler & Whitney's CD (2001), a form which is supposed to occur in *terra firme* forest. Additional tape recordings of *H. naevius* from PSNR would be useful to shed further light on the issue. **SPECIMEN DATA** – MCCI-2599 (tissue sample, skin in the UNAP), male, *wing*: 60.0; *tail*: 39.0; *tarsus*: 20.5; *bill*: 17.3.

Black-faced Antthrush *Formicarius analis* (fig. 12) and **Rufous-capped Antthrush** *Formicarius colma* (fig. 13) - These two species are sympatric over a broad area of Amazonia. Where found together, they tend to segregate by habitat, with *F. colma* being found mostly in higher ravines and on drier ridges, and *F. analis* preferring second growth and *varzea*, although factors affecting their distributions in some areas are not well known (Krabbe & Schulenberg, 2003). At Yarina, both species were common, *F. analis* especially so (or perhaps simply more vocal). Four individuals of *F. analis* and five *F. colma* were mist-netted here. Interestingly, the two species seemed to share the same habitat here, with 2 *F. analis* and 3 *F. colma* being captured in a single line of mist-nets on March 15, and both species being repeatedly recorded by sight and sound along the short trail behind the lodgings. At XX de Enero however only *F. analis* was recorded.

SPECIMEN DATA – *Formicarius analis* – MCCI-2532 (skin and tissue), female, *wing*: 90.5; *tail*: 52.5; *tarsus*: 32.0; *bill*: 23.9; *weight*: 50.0; *bill*: black; *legs*: pinkish-grey. MCCI-2602 (tissue sample, skin in the UNAP), female, *wing*: 91.0; *tail*: 50.0; *tarsus*: 31.6; *bill*: 20.5, *weight*: 45.0 g.

MCCI-2601 (tissue sample, skin in the UNAP), male, *wing*: 96.0; *tail*: 59.0; *tarsus*: 29.3; *bill*: 25.1, *weight*: 49.4 g. *Formicarius colma* – MCCI-2530 (skin and tissue), male, *wing*: 87.5; *tail*: 53.0; *tarsus*: 30.1; *bill*: 22.7; *iris*: chocolate-brown; *bill*: blackish-grey; *legs*: brown-grey. MCCI-2600 (tissue sample, skin in the UNAP), female, *wing*: 84.0; *tail*: 58.0; *tarsus*: 27.8; *bill*: 20.4, *weight*: 39.7 g.

White-headed Marsh-Tyrant *Arundicola leucocephala* - (fig. 16) - An individual of this species collected at XX de Enero on March 22 showed well developed testes (6 x 2 mm), as a proof of an ongoing breeding activity. There is no information on breeding in Peru, but in Colombia birds in breeding condition have been reported between January and March (Hilty & Brown, 1986). SPECIMEN DATA – MCCI-2543 (skin and tissue), male, *wing*: 63.0; *tail*: 46.0; *tarsus*: 16.1; *bill*: 17.0; *weight*: 13.0; *iris*: dark brown; *legs*: blackish. MCCI-2603 (tissue sample, skin in the UNAP), female, *wing*: 53.0; *tail*: 42.0; *tarsus*: 15.6; *bill*: 18.5; *iris*: dark brown; *legs*: blackish.

Johannes's Tody-Tyrant *Hemitriccus iohannis* - Single individuals, possibly the same bird, were observed on March 22 and 23 in flooded, *Cecropia*-dominated second growth at XX de Enero. These observations, along with those of Begazo & Valqui (1998a), suggest that this generally uncommon species is widespread in PSNR.

Swainson's Thrush *Catharus ustulatus* - A single bird observed at Yarina on March 15 constitutes the first record for PSNR. Given the date, this individual is perhaps more likely to have been a spring transient rather than a wintering bird, especially since the wintering range of Swainson's Thrush centres on Andean slopes rather than the Amazonian lowlands (Ridgely & Tudor, 1994). A recent review of the wintering range of the congeneric Veery *C. fuscescens* showed that in order to accurately determine the wintering ranges of North American migrants, only records from mid-winter (December-February) should be used (Remsen, 2001), and surveys during this period would be needed in order to assess whether *C. ustulatus* actually winters in PSNR.

Lesson's Seedeater *Sporophila bouvronides* - Six adult males were observed at very close range as they were feeding in tall riverside grasses at Yarina on March 16, the lack of a white crown stripe separating this species from the similar Lined Seedeater *S. lineola* being quite evident. This is the first record of this species from PSNR.

Black-and-white Seedeater *Sporophila luctuosa* - A single adult male was in a mixed *Sporophila* flock between XX de Enero and Yarina on March 14. Although there is at least one previous record of this species from PSNR, our sighting is nevertheless noteworthy since this species is generally restricted to Andean slopes above 1200 meters, and only occasionally occurs in the Amazonian lowlands (Ridgely & Tudor, 1989). Collecting such records may therefore help to establish temporal pat-

terns of occurrence for this species away from the Andes; records in the Amazonian lowlands of south-eastern Peru in Madre de Dios span the period from August to November, while in nearby western Amazonian Brazil on the upper Rio Juruá *S. luctuosa* was recorded in December, January, and February (Whittaker & Oren, 1999). Records in the Amazonian lowlands of Ecuador span the period between August and January (Ridgely & Greenfield, 2001). Our record suggests that at least in the northern Peruvian Amazon this species also occurs somewhat later in the year.

Guira Tanager *Hemithraupis guira* - A single individual in a mixed species canopy flock upstream from Yarina on March 19 is a first record for PSNR. The lack of previous records for this normally reasonably common and conspicuous species is somewhat puzzling.

Discussion

The relatively brief duration of the survey allowed us only a preliminary assessment of the avifauna of the area, and the list compiled is certainly very incomplete. In particular, tyrant flycatchers (Tyrannidae) and ovenbirds (Furnariidae) are probably particularly under-represented, due to difficulties with field identification and lack of familiarity with some vocalisations. Species restricted to the canopy are also likely to be under-represented, again due to identification difficulties with distant, fast-moving canopy flocks and the impossibility of using mist-nets to sample this habitat. More puzzling was the lack of certain vocally conspicuous species, such as Screaming Piha *Lipaugus vociferans*, that were not detected despite being reportedly common in other parts of PSNR. In fact several other species typical of varzea habitats, such as Varzea Schiffornis *Schiffornis major* and Cinnamon Attila *Attila cinnamomeus*, were detected by voice only very infrequently, which may reflect a lack of vocal activity by some species at this time of the year rather than their actual absence or scarcity.

Nevertheless, some preliminary conclusions can be drawn. The 190 species recorded at Yarina in six days of field work suggest that this area harbours a very high diversity of species. Furthermore, the presence of species such as Pale-winged Trumpeter *Psophia leucoptera* and Red-and-green Macaw *Ara chloroptera* suggest a low level of human disturbance.

Species diversity at XX de Enero is likely to be significantly lower than at Yarina. Although 144 species were recorded here in three days of field work (similar to the total recorded over the first three days at Yarina), it is likely that a higher proportion of the avifauna was recorded at XX de Enero due to the greater detectability of many of the species there. Of the 246 species recorded overall, only 109 were recorded at both sites. This is due



Fig. 6. *Galbula cyanicollis*.



Fig. 7. *Galbula cyanescens*.



Fig. 8. *Pteroglossus azara* was present with the brown-mandibled subspecies *mariae*.



Fig. 9. *Deconychura stictolaema*, male.



Fig. 10. *Xenops minutus*, male.



Fig. 11. *Hypocnemis cantator*, female: according the split proposed by Isler *et al.* (2007), the taxon found in PSRN is *H. peruviana*.



Fig. 12. *Formicarius analis*, juvenile.



Fig. 13. *Formicarius colma*.



Fig. 14. *Phlegopsis nigromaculata*, male.



Fig. 15. *Hylophylax naevius*, male.



Fig. 16. *Arundicola leucocephala*, male.



Fig. 17. *Pipra filicauda*, male, the commonest species in the mist-net sample.

to the differences in habitat and in human disturbance. Most of the species present at XX de Enero and not recorded at Yarina fall in three different categories. The first includes species closely associated with disturbed and open habitats, such as Canary-winged Parakeet *Brotogeris versicolurus*,

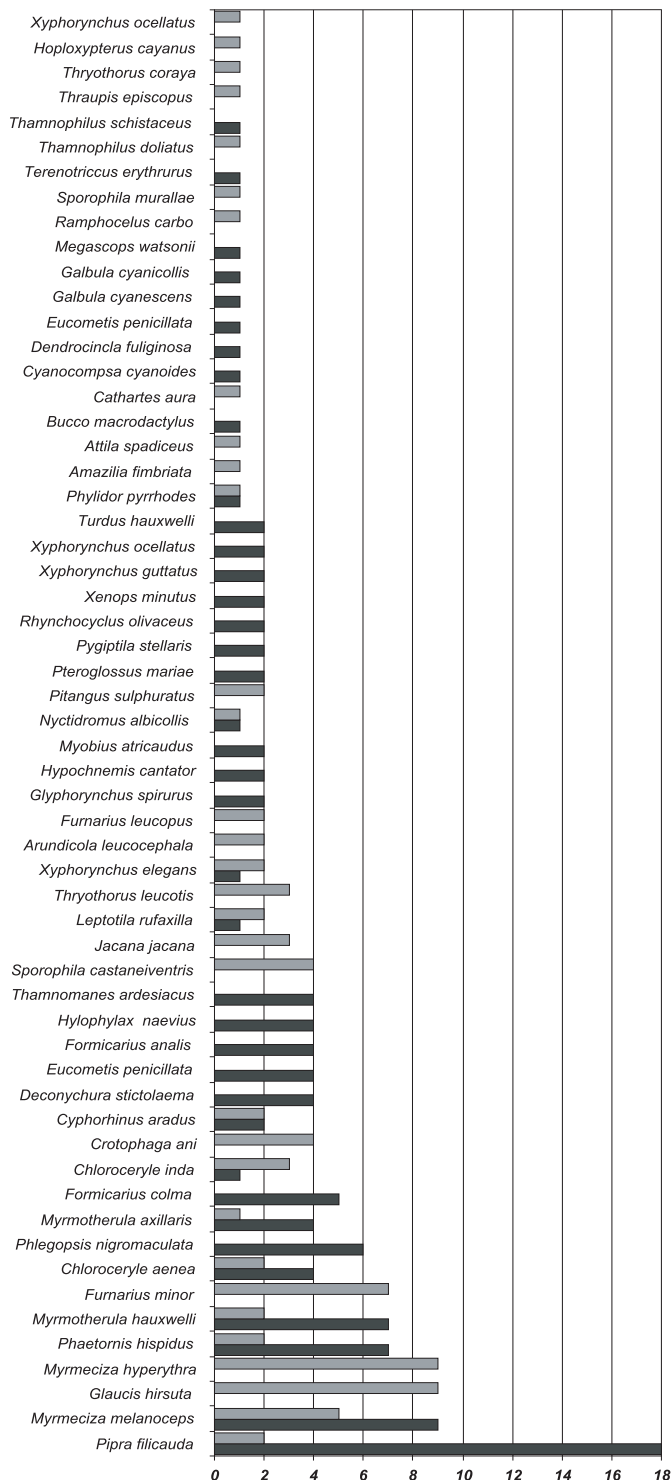


Fig. 18. List of the 196 birds mist-netted at both Yarina (in black) and XX de Enero (in grey). Species are ranked according to abundance.

Little Cuckoo *Piaya minuta*, Striped Cuckoo *Tapera naevia*, House Wren *Troglodytes aedon* and Yellow-browed Sparrow *Ammodramus aurifrons*. The second category includes taxa associated with river and marsh habitats, which occur at XX de Enero due to its proximity to the Marañon river. These include birds such as Neotropic Cormorant *Phalacrocorax brasilianus*, Snowy Egret *Egretta thula*, Pied Lapwing *Hoploxypterus cayanus*, Large-billed Tern *Phaetusa simplex*, Yellow-billed Tern *Sternula supercilialis*, White-headed Marsh-Tyrant *Arundicola leucocephala*, Yellow-hooded Blackbird *Chrysomus icterocephalus*, and others. This reflects a pattern previously reported elsewhere in Loreto, with species such as *Phalacrocorax brasilianus*, *Phaetusa simplex* and *Sternula supercilialis* being recorded along smaller rivers only in the immediate vicinity of their mouths (Diamond & Terborgh, 1967). The third category includes species associated with successional habitats on river islands. They include among others Lesser Horned *Furnarius minor*, Red-and-white Spinetail *Certhiaxis mustelina*, and Lead-colored Antwren *Myrmotherula assimilis*. Since river island habitats were not sampled extensively at XX de Enero, other species, such as Castelnau's Antshrike *Thamnophilus cryptoleucus* and Ash-breasted Antbird *Myrmoborus lugubris* are likely to be present here as well. On the other hand, almost all of the species present at Yarina, but absent from XX de Enero are tied to forest habitats, and the few aquatic birds recorded at Yarina, but not at XX de Enero, such as Agami Heron *Agamia agami*, Green Ibis *Mesembrinibis cayennensis*, and Horned Screamer *Anhima cornuta*, are typically found in relatively undisturbed habitats. Out of a total of 57 bird species mist-netted in the forest undergrowth, 32 were found at XX de Enero and 38 at Yarina (fig. 18). The greater diversity of forest species at Yarina is further underlined by the fact that certain forest-based families, such as the typical antbirds (Thamnophilidae) were much better represented at Yarina than at XX de Enero (19 species vs. 12 species).

Further surveys are clearly needed in order to achieve a reasonably complete bird list for the Yanayacu-Pucate area, but preliminary results indicate that this area supports an interesting and diverse Amazonian avifauna. Possible priorities for future surveys include better sampling of the canopy avifauna, clearing up the taxonomic status of a number of forms occurring in the reserve, including *Pyrhura picta* and *Hylophylax naevius*, searching for populations of threatened species that have been recorded elsewhere in the reserve (most notably Wattled Curassow *Crax globulosa*) and surveying the upper reaches of the Rio Yanayacu-Pucate, which have not yet been visited by ornithologists.

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References

Begazo A.J., Valqui T.H., 1998a. Birds of Pacaya-Samiria National Reserve with a new population (*Myrmotherula longicauda*) and a new record for Peru (*Hylophilus semicinereus*). Buletin of British Ornithological Club, 118: 159-166.

Begazo A.J., Valqui T.H., 1998b. Birds of the Pacaya-Samiria National Reserve. Unpublished annotated checklist.

Clements J.F., Shany N., 2001. A Field Guide to the Birds of Peru. Ibis Publishing Company, Temecula, California.

Diamond J.M., Terborgh J. W., 1967. Observations on bird distribution and feeding assemblages along the Rio Callaria, Department of Loreto, Peru. Wilson Bulletin, 79: 273-282.

Hilty S.L., Brown W.L., 1986. A Guide to the Birds of Colombia. Princeton University Press, Princeton, N.J.

Isler, M. L., Isler P. R., Whitney B. M., 2007. Species limits in Antbirds (Thamnophilidae): The Warbling Antbirds (*Hypocnemis cantator*) complex. Aux 124 (1): 11-28.

Isler P.R., Whitney B.M., 2002. Songs of the Antbirds: Thamnophilidae, Formicariidae and Conopophagidae. Library of Natural Sounds, Cornell Laboratory of Ornithology, Ithaca, New York.

Janni O., G. Boano, M. Pavia, G. Gertosio [in press]. Notes on the breeding of birds in Yanachaga-Chemillen National Park, Peru. Cotinga.

Joseph L., 2002. Geographical variation, taxonomy and distribution of some Amazonian *Pyrrhura* parakeets. Ornitologia Neotropical, 13: 337-363.

Krabbe N.K., Schulenberg T.S., 2003. Family Formicariidae (Ground Antbirds), pp. 682-731. In: del Hoyo J., Elliot A., Christie D.A (eds), 2003. Handbook of the Birds of the World, Volume 8: Broadbills to Tapaculos. Lynx Editions, Barcelona.

Marantz C.A., Aleixo A., Bevier L.B., Patten M.A., 2003. Family Dendrocolaptidae (Woodcreepers), pp. 358-447. In: del Hoyo J., Elliot A., Christie D.A. (eds), 2003. Handbook of the Birds of the World, Volume 8: Broadbills to Tapaculos. Lynx Editions, Barcelona.

Remsen J.V., 2003. Family Furnariidae (Ovenbirds), pp. 162-357. In: del Hoyo J., A. Elliot, D.A. Christie (eds), 2003. Handbook of the Birds of the World, Volume 8: Broadbills to Tapaculos. Lynx Editions, Barcelona.

Remsen J.V., 2001. True winter range of the Veery (*Catharus fuscescens*): lessons for determining winter ranges for species that winter in the tropics. The Auk, 108: 838-848.

Remsen, J. V., Cadena Jr., C. D., Jaramillo A., Nores M., Pacheco J. F., Robbins M. B., Schulenberg T. S., Stiles F. G., Stotz D. F., Zimmer K. J. Version 21 December 2007. A classification of the bird species of South America. American Ornithologists' Union.
<<http://www.museum.lsu.edu/~Remsen/SACCBaseline.html>>

Ridgely R. S., Greenfield P. J., 2001. The Birds of Ecuador. Volume 1: Status, distribution, and taxonomy. Cornell University Press, Ithaca, NY.

Ridgely R.S., Tudor G., 1989. The Birds of South America. Volume I: The Oscine Passerines. University of Texas Press, Austin, Texas.

Ridgely R.S., Tudor G., 1994. The Birds of South America. Volume II: The suboscine Passerines. University of Texas Press, Austin, Texas.

Robbins M.B., Capparella A.P., Ridgely R.S., Cardiff S.W., 1991. Avifauna of the Río Maniti and Quebrada Vainilla, Peru. Proceedings of the Academy of Natural Sciences of Philadelphia, 143: 145-159.

Schulenberg T.S., Stotz D.F., Lane D.F., O'Neill J.P., Parker III T.A., 2007. Birds of Peru. Princeton University Press, Princeton.

Wiley R. H., 1999. Birds of lowland Loreto, Peru (below 200 m elevation). Available: <http://www.unc.edu/~rhwiley/loreto/loretolist.html>.

Whittaker A., Oren D.C., 1999. Important ornithological records from the Rio Juruá, western Amazonia, including twelve additions to the Brazilian avifauna. Buletin of British Ornithological Club, 119: 235-260.

Zimmer K.J., Isler M.L., 2003. Family Thamnophilidae (Typical Antbirds), pp. 448-681. In del Hoyo J., Elliot A., Christie D.A. eds., 2003. Handbook of the Birds of the World, Volume 8: Broadbills to Tapaculos. Lynx Editions, Barcelona.

Appendix 1 - List of the species observed during the ECOMUSA survey in the Pacaya-Samiria National Reserve. For the two different localities an indicative abundance value is also given, based on our own data.

C: Common (5+ individuals recorded daily), **F:** Fairly

common (recorded on most days, usually less than 5 individuals), **U:** Uncommon (not recorded most days), **R:** Rare (no more than 1-2 records per site).

The (*) mark species documented with photo and/or specimen.

Common Name	Scientific Name	Yarina	XX Enero	Documented
Cinereous Tinamou	<i>Crypturellus cinereus</i>	F	U	
Little Tinamou	<i>Crypturellus soui</i>	U	U	
Undulated Tinamou	<i>Crypturellus undulatus</i>	F	F	
Neotropic Cormorant	<i>Phalacrocorax brasilianus</i>	U		
Rufescent Tiger-Heron	<i>Tigrisoma lineatum</i>	U		
Capped Heron	<i>Pilherodius pileatus</i>	F	U	
Boat-billed Heron	<i>Cochlearius cochlearius</i>	U		
Cattle Egret	<i>Bubulcus ibis</i>		U	
Striated Heron	<i>Butorides striata</i>	U	C	
Snowy Egret	<i>Egretta thula</i>		U	
Great Egret	<i>Ardea alba</i>	U	F	
Cocoi Heron	<i>Ardea cocoi</i>	C	C	
Agami Heron	<i>Agamia agami</i>	R		
Green Ibis	<i>Mesembrinibis cayennensis</i>	F		
Horned Screamer	<i>Anhima cornuta</i>	U		
Muscovy Duck	<i>Cairina moschata</i>	U	U	
Black Vulture	<i>Coragyps atratus</i>	F	C	*
Turkey Vulture	<i>Cathartes aura</i>	U	C	*
Lesser Yellow-headed Vulture	<i>Cathartes burrovianus</i>		F	*
Greater Yellow-headed Vulture	<i>Cathartes melambrotus</i>	F		
King Vulture	<i>Sarcorampus papa</i>	U	U	
Osprey	<i>Pandion haliaetus</i>		U	
Slender-billed Kite	<i>Rostrhamus hamatus</i>	U	U	
Plumbeous Kite	<i>Ictinia plumbea</i>	F	F	
Slate-colored Hawk	<i>Leucopternis schistaceus</i>	U		
Great Black-Hawk	<i>Buteogallus urubitinga</i>	U		
Black-collared Hawk	<i>Busarellus nigricollis</i>	C	C	*
Roadside Hawk	<i>Buteo magnirostris</i>	U	C	
Red-throated Caracara	<i>Ibycter americanus</i>	U		
Black Caracara	<i>Dapturus ater</i>	U		
Yellow-headed Caracara	<i>Milvago chimachima</i>	F	C	
Laughing Falcon	<i>Herpetotheres cachinnans</i>		U	
Bat Falcon	<i>Falco rufigularis</i>	F		
Blue-throated Piping-Guan	<i>Pipile cumanensis</i>	R		
Pale-winged Trumpeter	<i>Psophia leucoptera</i>	R		
Sungrebe	<i>Heliornis fulica</i>	C	F	
Wattled Jacana	<i>Jacana jacana</i>		C	*
Pied Lapwing	<i>Hoploxypterus cayanus</i>		U	*
Spotted Sandpiper	<i>Actitis macularia</i>		U	
Large-billed Tern	<i>Phaetusa simplex</i>		C	
Yellow-billed Tern	<i>Sternula superciliosa</i>		C	
Pale-vented Pigeon	<i>Patagioenas cayennensis</i>		F	
Plumbeous Pigeon	<i>Patagioenas plumbea</i>	F	F	
Ruddy Pigeon	<i>Patagioenas subvinacea</i>	U	U	
Gray-fronted Dove	<i>Leptotila rufaxilla</i>	F	F	*
Blue-and-yellow Macaw	<i>Ara ararauna</i>	F		

Common Name	Scientific Name	Yarina	XX Enero	Documented
Red-and-green Macaw	<i>Ara chloropterus</i>	U		
Red-bellied Macaw	<i>Orthopsittaca manilata</i>	F	U	
White-eyed Parakeet	<i>Aratinga leucophthalma</i>		C	
Dusky-headed Parakeet	<i>Aratinga weddellii</i>	F		
"Painted" Parakeet	<i>Pyrrhura cfr. picta</i>	U	U	
Dusky-billed Parrotlet	<i>Forpus sclateri</i>		U	
Cobalt-winged Parakeet	<i>Brotogeris cyanopectera</i>	C	C	
Tui Parakeet	<i>Brotogeris sanctithomae</i>		U	
Canary-winged Parakeet	<i>Brotogeris versicolurus</i>		C	
Black-capped Parrot	<i>Pionites melanocephalus</i>	U		
Orange-cheeked Parrot	<i>Pionopsitta barrabandi</i>	R		
Short-tailed Parrot	<i>Graydidascalus brachyurus</i>	R	F	
Blue-headed Parrot	<i>Pionus menstruus</i>	C		
Orange-winged Parrot	<i>Amazona amazonica</i>	F	F	
Mealy Parrot	<i>Amazona farinosa</i>	F	F	
Squirrel Cuckoo	<i>Piaya cayana</i>	U		
Little Cuckoo	<i>Piaya minuta</i>		U	
Smooth-billed Ani	<i>Crotophaga ani</i>	U	C	*
Greater Ani	<i>Crotophaga major</i>	F	F	
Striped Cuckoo	<i>Tapera naevia</i>		U	
Hoatzin	<i>Opisthocomus hoazin</i>		U	
Tropical Screech-Owl	<i>Megascopus choliba</i>		F	
Tawny-bellied Screech-Owl	<i>Megascopus watsonii</i>	U		*
Spectacled Owl	<i>Pulsatrix perspicillata</i>		F	
Ferruginous Pigmy-Owl	<i>Glaucidium brasilianum</i>	F		
Common Potoo	<i>Nyctibius griseus</i>	F	U	
Short-tailed Nighthawk	<i>Lurocalis semitorquatus</i>	C	F	
Common Nighthawk (?)	<i>Chordeiles cfr minor</i>	R		
Sand-colored Nighthawk	<i>Chordeiles rupestris</i>		F	*
Common Parakeet	<i>Nyctidromus albicollis</i>	C	C	*
Short-tailed Swift	<i>Chaetura brachyura</i>	F	F	
Fork-tailed Palm-Swift	<i>Tachornis squamata</i>	C	C	
Rufous-breasted Hermit	<i>Glaucis hirsutus</i>		F	*
Pale-tailed Barbthroat	<i>Threnetes leucurus</i>	R		
White-bearded Hermit	<i>Phaetornis hispidus</i>	F	U	*
Needle-billed/Straight-billed Hermit	<i>Phaetornis philippii/bourcierii</i>	U		
Reddish Hermit	<i>Phaetornis ruber</i>	R		
Long-tailed Hermit	<i>Phaetornis superciliosus</i>	U		
White-necked Jacobin	<i>Florisuga mellivora</i>		U	
Black-throated Mango	<i>Anthracothonax nigricollis</i>		U	
White-chinned Sapphire	<i>Hylocharis cyanus</i>		U	
Glittering-throated Emerald	<i>Amazilia fimbriata</i>	U	F	*
Sapphire-spangled Emerald	<i>Amazilia lactea</i>		F	
Black-tailed Trogon	<i>Trogon melanurus</i>	F	F	
Violaceous Trogon	<i>Trogon violaceus</i>	R		
White-tailed Trogon	<i>Trogon viridis</i>	C	F	
Ringed Kingfisher	<i>Megaceryle torquata</i>	C	C	
American Pigmy Kingfisher	<i>Chloroceryle aenea</i>	F	F	*
Amazon Kingfisher	<i>Chloroceryle amazona</i>	C	C	
Green-and-rufous Kingfisher	<i>Chloroceryle inda</i>	F	F	*
Rufous Motmot	<i>Baryphthengus martii</i>	R		

Common Name	Scientific Name	Yarina	XX Enero	Documented
White-eared Jacamar	<i>Galbacyrhynchus leucotis</i>	F	U	
Blue-cheeked Jacamar	<i>Galbula cyanicollis</i>	R		*
Bluish-fronted Jacamar	<i>Galbula cyanescens</i>	R	F	*
Chestnut-capped Puffbird	<i>Bucco macrodactylus</i>	R		*
Rufous-necked Puffbird	<i>Malacoptila rufa</i>	R		
Black-fronted Nunbird	<i>Monasa nigrifrons</i>	C	C	
Swallow Wing	<i>Chelidoptera tenebrosa</i>	C	U	
Scarlet-crowned Barbet	<i>Capito aureovirens</i>	F	F	
Gilded Barbet	<i>Capito auratus</i>	U	U	
Lemon-throated Barbet	<i>Eubucco richardsoni</i>	U	U	
Ivory-billed Aracari	<i>Pteroglossus azara</i>	U		*
Chestnut-eared Aracari	<i>Pteroglossus castanotis</i>	F		*
Lettered Aracari	<i>Pteroglossus inscriptus</i>	U		
Many-banded Aracari	<i>Pteroglossus pluricinctus</i>		U	
White-throated Toucan	<i>Ramphastos tucanus</i>	C	C	*
Channel-billed Toucan	<i>Ramphastos vitellinus</i>	U		
Plain-breasted Piculet	<i>Picumnus castelnau</i>		F	
Yellow-tufted Woodpecker	<i>Melanerpes cruentatus</i>	F	F	
Spot-breasted Woodpecker	<i>Colaptes punctigula</i>	U	F	
Chestnut Woodpecker	<i>Celeus elegans</i>	F	U	
Cream-colored Woodpecker	<i>Celeus flavus</i>	R	U	
Scale-breasted Woodpecker	<i>Celeus grammicus</i>	U		
Ringed Woodpecker	<i>Celeus torquatus</i>	R		
Lineated Woodpecker	<i>Dryocopus lineatus</i>	?	U	
Crimson-crested Woodpecker	<i>Campephilus melanoleucos</i>	U	U	*
Plain-brown Woodcreeper	<i>Dendrocincla fuliginosa</i>	F	F	*
Spot-throated Woodcreeper	<i>Deconychura stictolaema</i>	F		*
Olivaceous Woodcreeper	<i>Sittasomus griseicapillus</i>	U		
Wedge-billed Woodcreeper	<i>Glyphorhynchus spirurus</i>	R		*
Long-billed Woodcreeper	<i>Nasica longirostris</i>	F	F	
Cinnamon-throated Woodcreeper	<i>Dendrexetastes rufigula</i>	U		
Strong-billed Woodcreeper	<i>Xiphocolaptes promeropirhynchus</i>		U	
Amazonian Barred-Woodcreeper	<i>Dendrocolaptes certhia</i>		U	
Buff-throated Woodcreeper	<i>Xiphorhynchus guttatus</i>	C	U	*
Striped Woodcreeper	<i>Xiphorhynchus obsoletus</i>		U	*
Ocellated Woodcreeper (?)	<i>Xiphorhynchus</i> cfr. <i>ocellatus</i>	U		
Straight-billed Woodcreeper	<i>Xiphorhynchus picus</i>	F		*
Elegant Woodcreeper	<i>Xiphorhynchus elegans</i>	F		*
Pale-legged Hornero	<i>Furnarius leucopus</i>		U	*
Lesser Hornero	<i>Furnarius minor</i>		F	*
Dark-breasted Spinetail	<i>Synallaxis albigularis</i>		U	
Red-and-white Spinetail	<i>Certhiaxis mustelinus</i>		F	*
Orange-fronted Plushcrown	<i>Metopothrix aurantiaca</i>	F	F	
Cinnamon-rumped Foliage-Gleaner	<i>Philydor pyrrhodes</i>	U	U	*
Plain Xenops	<i>Xenops minutus</i>	U	U	*
Great Antshrike	<i>Taraba major</i>		U	
Barred Antshrike	<i>Thamnophilus doliatus</i>	R	C	*
Plain-winged Antshrike	<i>Thamnophilus schistaceus</i>	C	U	*
Spot-winged Antshrike	<i>Pygiptila stelleris</i>	U		*
Saturnine Antshrike	<i>Thamnomanes saturninus</i>	C	F	*
White-flanked Antwren	<i>Myrmotherula axillaris</i>	C	F	*

Common Name	Scientific Name	Yarina	XX Enero	Documented
Pygmy Antwren	<i>Myrmotherula brachyura</i>	U	U	
Plain-throated Antwren	<i>Myrmotherula huxwelli</i>	F	U	*
Stripe-chested Antwren	<i>Myrmotherula longicauda</i>	U		
Amazonian Streaked-Antwren	<i>Myrmotherula multostriata</i>	F		
Leaden Antwren	<i>Myrmotherula assimilis</i>		U	
Gray Antbird	<i>Cercomacra cinerascens</i>	F	U	
Blackish Antbird	<i>Cercomacra nigrescens</i>	U		
Warbling Antbird	<i>Hypocnemis cantator</i> (1)	F		*
Band-tailed Antbird	<i>Hypocnemoides maculicauda</i>	F	U	
Silvered Antbird	<i>Sclateria naevia</i>	U		
Black-throated Antbird	<i>Myrmeciza atrothorax</i>	U		
White-shouldered Antbird	<i>Myrmeciza melanoceps</i>	C	C	*
Plumbeous Antbird	<i>Myrmeciza hyperythra</i>	C	C	*
Spot-backed Antbird	<i>Hylophylax naevius</i>	F		*
Black-spotted Bare-eye	<i>Phlegopsis nigromaculata</i>	F		*
Black-faced Antthrush	<i>Formicarius analis</i>	C	F	*
Rufous-capped Antthrush	<i>Formicarius colma</i>	F	U	*
Slender-footed Tyrannulet	<i>Zimmerius gracilipes</i>	U		
Yellow-crowned Tyrannulet	<i>Tyrannulus elatus</i>	F	F	
Johannis' Tody-Tyrant	<i>Hemitriccus iohannis</i>		U	
Olivaceous Flatbill	<i>Rhynchocyclus olivaceus</i>	U	U	*
Tolmomyias sp.	<i>Tolmomyias</i> sp.		U	
Ruddy-tailed Flycatcher	<i>Terentotriccus erythrurus</i>	F		*
Black-tailed Flycatcher	<i>Myiobius atricaudus</i>	U		*
Eastern Wood-Pewee	<i>Contopus virens</i>	R		
White-headed Marsh-Tyrant	<i>Arundicola leucocephala</i>		F	*
Dull-capped Attila	<i>Attila bolivianus</i>	R	U	
Bright-rumped Attila	<i>Attila spadiceus</i>	R		*
Cinnamon Attila	<i>Attila cinnamomeus</i>		F	
Grayish Mourner	<i>Rhytipterna simplex</i>	R		
Short-crested Flycatcher	<i>Myiarchus ferox</i>	R	U	
Dusky-capped Flycatcher	<i>Myiarchus tuberculifer</i>	F		
Lesser Kiskadee	<i>Pitangus lictor</i>	C	C	
Great Kiskadee	<i>Pitangus sulphuratus</i>	C	C	*
Boat-billed Flycatcher	<i>Megarynchus pitangua</i>	R		
Gray-capped Flycatcher	<i>Myiozetetes granadensis</i>	R		
Social Flycatcher	<i>Myiozetetes similis</i>	C	C	
Tropical Kingbird	<i>Tyrannus melancholicus</i>	C	C	
Fork-tailed Flycatcher	<i>Tyrannus savana</i>	F	C	
Eastern Kingbird	<i>Tyrannus tyrannus</i>		F	
Chestnut-crowned Becard	<i>Pachyramphus castaneus</i>	R	U	
Black-capped Becard	<i>Pachyramphus marginatus</i>		U	
White-winged Becard	<i>Pachyramphus polychopterus</i>		U	
Black-tailed Tityra	<i>Tityra cayana</i>	U	U	
Varzea Sciffornis	<i>Schiffornis major</i>		U	
Dwarf Tyrant-Manakin	<i>Tyrannetes stolzmanni</i>	U		
Wire-tailed Manakin	<i>Pipra filicauda</i>	C	U	*
Purple-throated Coti	<i>Porphyrolaema porphyrolaema</i>	R	U	

(1) - Subsequent to the publication of Schulenberg *et al.* (2007), the South American Checklist Committee (Remsen *et al.*, 2007) adopted the six-way split of *H. cantator* proposed by Isler *et al.*, 2007. According to this splitting, the species we recorded is *H. peruviana*, the Peruvian Warbling-Antbird"

Common Name	Scientific Name	Yarina	XX Enero	Documented
Bare-necked Fruitcrow	<i>Gymnoderus foetidus</i>	F	F	
Purple-throated Fruitcrow	<i>Querula purpurata</i>	R		
White-winged Swallow	<i>Tachycineta albiventer</i>	F	C	
Gray-breasted Martin	<i>Progne chalybea</i>		U	
White-banded Swallow	<i>Atticora fasciata</i>	U		
S. Rough-winged Swallow	<i>Stelgidopteryx ruficollis</i>	C	C	
Barn Swallow	<i>Hirundo rustica</i>	R	F	
Black-capped Donacobius	<i>Donacobius atricapilla</i>	U	C	
Thrush-like Wren	<i>Campylorhynchus turdinus</i>	F	F	
Coraya Wren	<i>Thryotorus coraya</i>	F	F	*
Buff-breasted Wren	<i>Thryotorus leucotis</i>	F	F	*
House Wren	<i>Troglodytes aedon</i>		U	
Musician Wren	<i>Cyphorhinus arada</i>	U		*
Swainson's Thrush	<i>Catharus ustulatus</i>	U		
Hauxwell's Thrush	<i>Turdus hauxwelli</i>	U		*
Tropical Gnatcatcher	<i>Polioptila plumbea</i>	U		
Yellow-browed Sparrow	<i>Ammodramus aurifrons</i>		C	*
Caquetà Seedeater	<i>Sporophila murallae</i>		F	*
Chestnut-bellied Seedeater	<i>Sporophila castaneiventris</i>	U	F	*
Lesson's Seedeater	<i>Sporophila bouvionides</i>	U	U	
Black-and-white Seedeater	<i>Sporophila luctuosa</i>	R		
Lesser Seed-Finch	<i>Oryzoborus angolensis</i>	U	U	
Blue-black Grosbeak	<i>Cyanocompsa cyanoides</i>	U		*
Red-capped Cardinal	<i>Paroaria gularis</i>	C	C	
Grayish Saltator	<i>Saltator coerulescens</i>		F	
Guira Tanager	<i>Hemithraupis guira</i>	R		
Hooded Tanager	<i>Nemosia pileata</i>	F	C	
Gray-headed Tanager	<i>Eucometis penicillata</i>	U	U	*
White-shouldered Tanager	<i>Tachyphonus luctuosus</i>	R		
Yellow-crested Tanager	<i>Tachyphonus rufiventer</i>	R		
Silver-beaked Tanager	<i>Ramphocelus carbo</i>	C	C	*
Masked Crimson Tanager	<i>Ramphocelus nigrogularis</i>	C	C	
Blue-gray Tanager	<i>Thraupis episcopus</i>	F	C	*
Palm Tanager	<i>Thraupis palmarum</i>	U	U	
Orange-bellied Euphonia	<i>Euphonia xanthogaster</i>	R		
Paradise Tanager	<i>Tangara chilensis</i>	F		
Turquoise Tanager	<i>Tangara mexicana</i>	U	U	
Green-and-gold Tanager	<i>Tangara schrankii</i>	U		
Yellow-bellied Dacnis	<i>Dacnis flaviventer</i>	U	U	
Black-faced Dacnis	<i>Dacnis lineata</i>	R		
Green Honeycreeper	<i>Chlorophanes spiza</i>	R		
Red-eyed Vireo	<i>Vireo olivaceus</i>		F	
Troupial	<i>Icterus icterus</i>	U		
Russet-backed Oropendola	<i>Psarocolius angustifrons</i>	C	C	
Yellow-rumped Cacique	<i>Cacicus cela</i>	C	C	
Oriole Blackbird	<i>Gymnomystax mexicanus</i>		U	
Yellow-hooded Blackbird	<i>Chrysomus icterocephalus</i>		F	
Velvet-fronted Grackle	<i>Lamprosar tanagrinus</i>	F	F	
Shiny Cowbird	<i>Molothrus bonariensis</i>	U		
Violaceous Jay	<i>Cyanocorax violaceus</i>	C	C	